37th Annual Air Targets, UAVs, and Range Division

"OSD T&E Vision"

Mr. John Gehrig
Deputy Director
Operational Test and Evaluation
Resources and Ranges

October 6, 1999

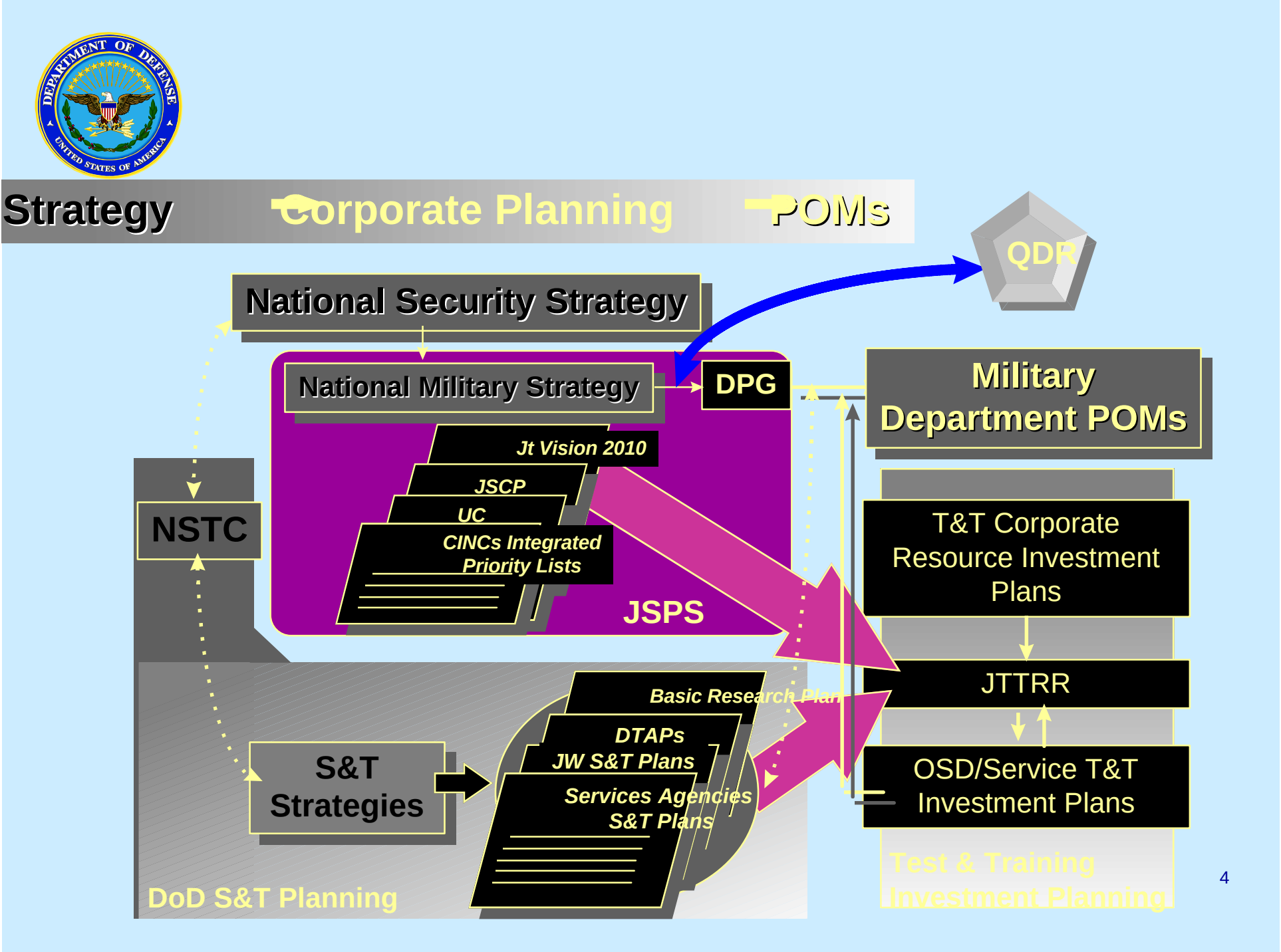
- Strategic Planning
  - Vision and Goals
- Investment Planning
  - Roadmapping
- Target Specific Initiatives
  - CTEIP Projects
  - Target Management Initiatives

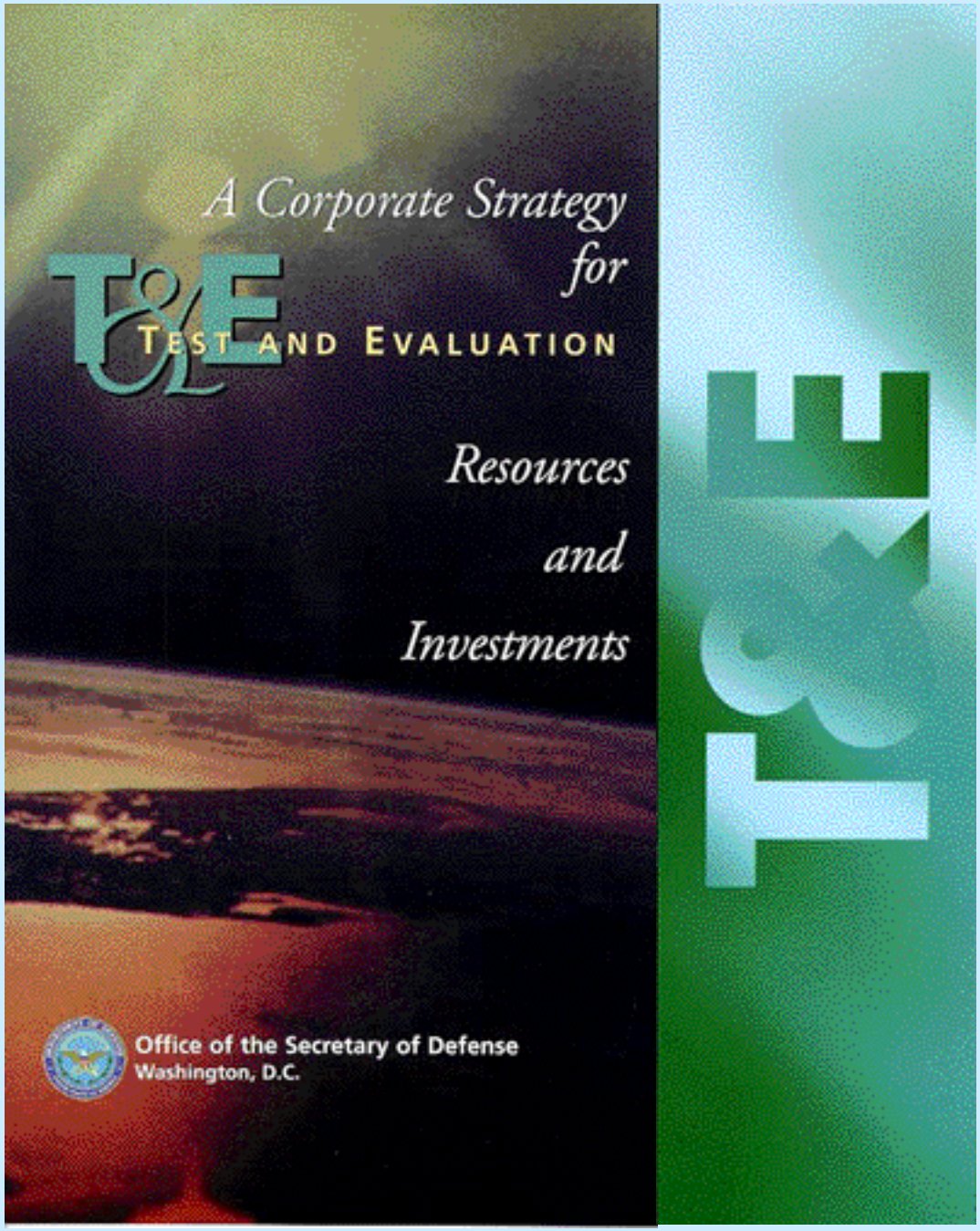
THE NEED

During this period of defense reform, it is imperative that a T&E Vision be shaped that is commensurate with the warfighter's Joint Vision (JV) 2010 strategies and planning. Rapidly advancing technology is shaping the warfighter systems of the 21st century. Similarly, test capability must modernize in order to support the system development and program decisions of this next generation of acquisitions.

"We have reached the point where it is imperative that we make a significant investment in test infrastructure modernization."

Hon. Philip E. Coyle
Director, Operational Test and Evaluation


Strategy
Corporate Planning
POMs
QDR
National Security Strategy
National Military Strategy
DPG
Military Department POMs
Jt Vision 2010
JSCP
UC
CINCs Integrated Priority Lists
JSPS
NSTC
T&T Corporate Resource Investment Plans
JTTRR
OSD/Service T&T Investment Plans
Test & Training Investment Planning
Basic Research Plan
DTAPs
JW S&T Plans
Services Agencies S&T Plans
S&T Strategies
DoD S&T Planning


A Corporate Strategy for
T&E
Test and Evaluation
Resources and Investments
Office of the Secretary of Defense
Washington, D.C.
T&E

THE T&E VISION & GOALS

- **Vision**
  - **Enable the fielding and use of affordable, superior weapons that are developed and tested in modern, efficient T&E facilities to support tomorrow's readiness.**
- **Goals**
  - **A strong T&E infrastructure for efficiency and productivity.**
  - **A foundation for the future T&E infrastructure.**
  - **A corporate investment process integrating all DoD processes.**
  - **Strategic partnerships.**

STAKEHOLDERS IN BUSINESS WITH T&E

Support Warfighters
Warfighters deserve superior weapons that work

Convey the Importance of T&E Investment to OSD
OSD's Acquisition reforms should highlight the importance of T&E in future planning, policy, and budgeting actions.

Ally with PEO's / PMs
Be part of the acquisition team.

Show Congress a Viable Investment Plan
We must ensure that Congress understands how and why T&E is a crucial part of the acquisition process.

Strategic Plan

Collaborate with Industry
Expand government-industry testing for T&E.

Work Corporately with the T&E Executive Agent
The T&E Executive Agent should provide investment guidance and direction.

Encourage Trainers as Full Partners
Join the T&E and training communities in range and facility development.

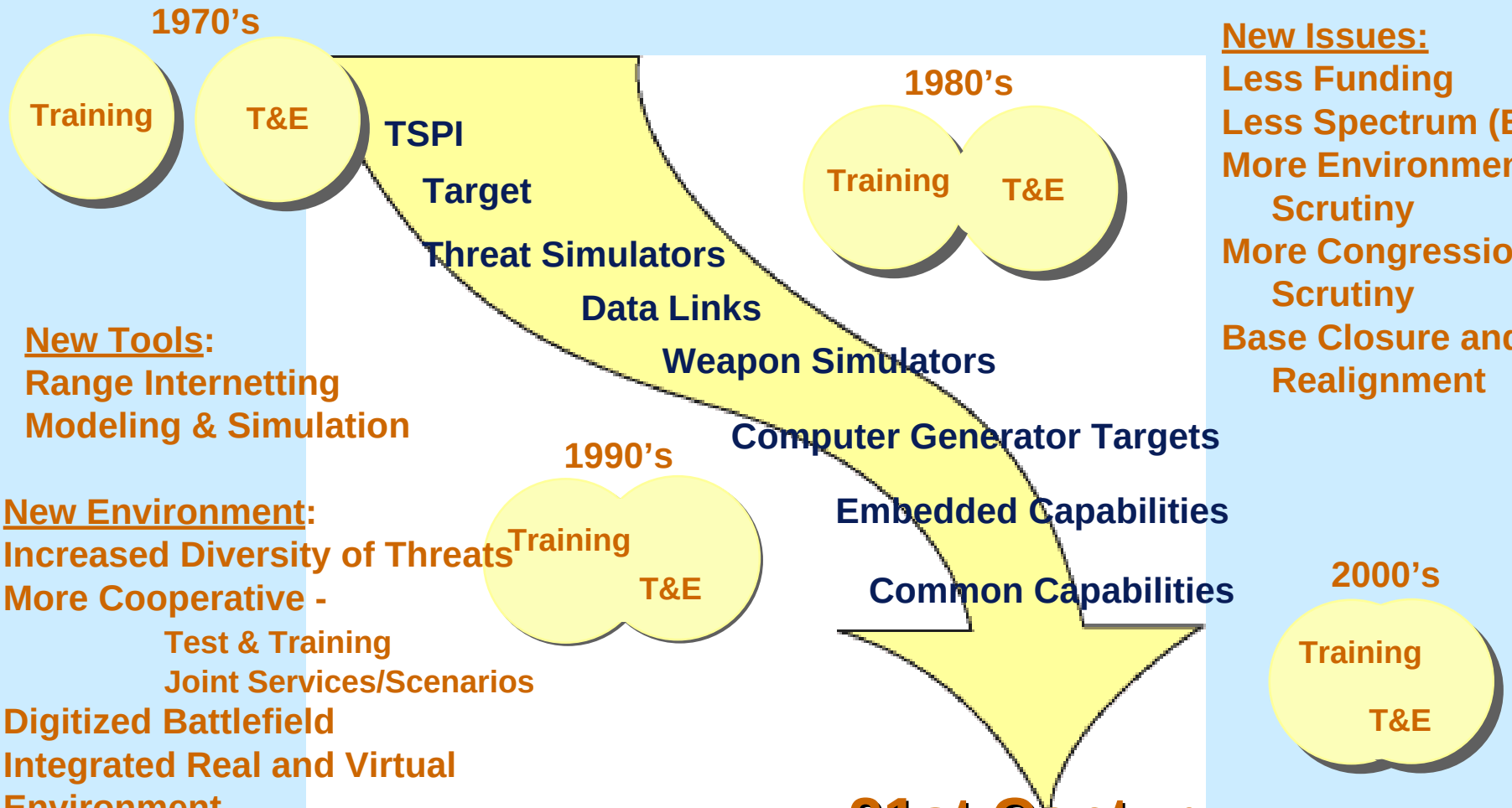
Support the T&E Workforce
Contributions should be encouraged, recognized, and rewarded.

Establish Links with S&T Laboratories
Transition emerging technologies to improve the T&E infrastructure.

WORKING TOGETHER MORE IMPORTANT THAN EVER

- Key T&T Range Issues
  - New technologies
  - Interoperabilities
  - Modeling & simulation
  - Land, Sea, and Air Space requirements
- OSD Role
  - A senior level focal point for range issues
  - “Change Agent” at heart of test and training cooperation debate
  - Defense Test & Training Steering Group (DTTSG) and other forums

WHY A TEST & TRAINING PARTNERSHIP



New Issues:
Less Funding
Less Spectrum (EM)
More Environmental Scrutiny
More Congressional Scrutiny
Base Closure and Realignment

New Tools:
Range Internetting
Modeling & Simulation

New Environment:
Increased Diversity of Threats
More Cooperative -
- Test & Training
- Joint Services/Scenarios

Digitized Battlefield
Integrated Real and Virtual Environment

21st Century
DoD Joint Training & Test Range Roadmap

THE JTTRR IS...

- Approved initially by the DTTSG (July 9, 1998)
- Well defined planning process that identifies opportunities for:
  - Collaborative instrumentation investment and use, where appropriate
  - Shared technology
- Foundation for common and interoperable instrumentation, without unwarranted duplication
- Medium to respond to Comptroller and Congressional inquiry

THE JTTRR DOES...

- Illustrate program plan
  - Intelligent and efficient acquisition strategy
    - Rationale long range planning tool
    - Defendable investments
  - Anticipate problems
  - Display capabilities
- Compare/contrast like investments
  - Leverage investments
  - Identify commonality/duplication

THE CENTRAL TEST AND EVALUATION INVESTMENT PROGRAM

- CTEIP established in 1990 to fund high priority, critical joint-use test capability projects:
  - Fund high-priority, multi-Service DoD modernization requirements
  - Apply state-of-the-art technologies to correct deficiencies in DoD capabilities
  - Achieve consistency, commonality, and interoperability
- Overall funding for CTEIP:
  - Congressionally mandated
  - Funding approximately 120M annually

INITIATIVES

- To establish formal networks through the use of state-of-the-art computers, telecommunications systems, and modeling and simulations, to effectively integrate and leverage T&E assets to maximize their utilization and efficiency for testing advanced, complex weapons systems.
- To make the investment in modeling & simulation, leveraging DMSO's common technical framework initiatives (i.e., High Level Architecture, conceptual models of the mission space, data standards), to ensure T&E assets support future acquisition community requirements for more effective and capable T&E.
- Develop strategic partnerships with PEO's and DRPM's that share test technology and resources to reduce investment expenditures and provide opportunities for joint ventures.

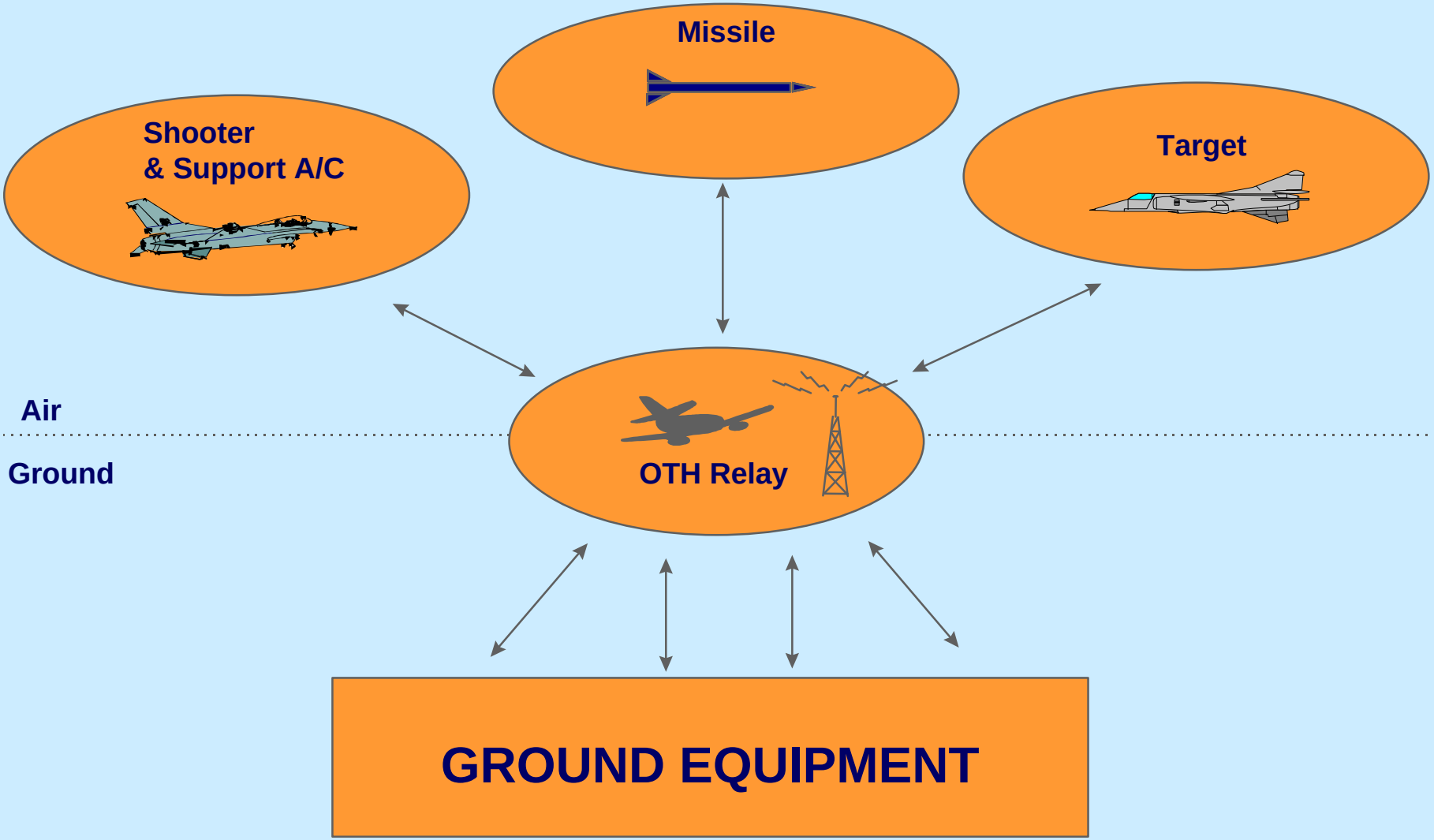
CTEIP ISSUES

- Multi-Service Target Control
  - Corporate Approach
  - Family of Transponders
  - Early IOC capability
- Target Modeling & Simulation
- IR Characterization

MSCTS/TRSOS ENHANCEMENTS

- Increased interoperability
- Increased target operating range
- Simpler OTH operations
- Ability to track missiles, shooters
- Spectrum Efficiency
- GPS Vector Scoring (If approved)
- Standardized FTS

SYSTEM OF SYSTEMS APPROACH



TARGET MANAGEMENT INITIATIVES

- DOT&E funded program to identify and apply existing technologies to provide solutions to the component's threat representation needs.
- Primary focus on improvement of *threat representations* in support of testing and training.

FY00 FOCUS AREAS

- Target Platforms
  - Unmanned Aerial Vehicle (UAV)
  - Joint Subscale Aerial Target
  - (JSAT) Legacy Project
- Target Signatures
  - IR, RF, Acoustic
- Target Interoperability
  - CDA
- Modeling and Simulation

THE FUTURE

- Declining defense budgets, encroachments into ranges and increasing weapon systems sophistication require T&E infrastructure improvements.
- Increased use of modeling & simulation.
- Increased thrust in common development via common architecture.
- Interconnectivity among test ranges, centers and training facilities.
- M&S + Common Architecture Developments + Interconnectivity = Future Test Infrastructure